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**REMARKS**

Claims 1-24 are pending in the application. Claim 22 has been amended herein. Favorable reconsideration of the application, as amended, is respectfully requested.

***I. ALLOWABLE SUBJECT MATTER***

Applicant acknowledges with appreciation the indicated allowability of claims 5-10, 15-20, 23 and 24. These claims will be in condition for allowance upon being amended to independent form.

***II. OBJECTION TO CLAIM 22***

Claim 22 stands objected to as mistakenly referring to "envelop". Claim 22 has been amended to refer correctly to --envelope--. Withdrawal of the objection is respectfully requested.

***III. REJECTION OF CLAIMS 1-4, 11-14 AND 21-22 UNDER 35 USC §103(a)***

Claims 1-4, 11-14 and 21-22 stand rejected under 35 USC §103(a) based on Korn (USP 6,424,221). This rejection is respectfully traversed for at least the following reasons.

The present application was filed in the USPTO on March 23, 2000, and therefore has an effective filing date of March 23, 2000.

Korn '221 was filed in the USPTO on January 25, 2001, and claims priority to provisional application No. 60/212,463, filed on June 19, 2000. Consequently, Korn '211 has an effective filing date of June 19, 2000.

Accordingly, the March 23, 2000 filing date of the present application precedes the June 19, 2000 effective filing date of Korn '211. As a result, Korn '211 is not an effective reference against the present invention under 35 USC §§102 and 103. Withdrawal of the rejection is respectfully requested.

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**IV. REJECTION OF CLAIMS 1-4, 11-14 AND 21-22 UNDER 35 USC §103(a)**

Claims 1-4, 11-14 and 21-22 stand rejected under 35 USC §103(a) based on *Faugeron*. This rejection is respectfully traversed for at least the following reasons.

*i. Claim 1*

Claim 1 defines a network receiver for receiving a modulated carrier signal from another network transceiver via a network medium. The network receiver includes an input amplifier which amplifies a received modulated carrier signal according to one of a plurality of amplifier gain settings and outputs an amplified carrier signal. In addition, the network receiver includes an envelope detector for outputting an envelope signal in response to the amplified carrier signal. A first gain control circuit selects a first gain setting in response to the envelope signal, the first gain setting being optimal for receiving a pulse position modulated carrier signal. A second gain control circuit selects a second gain control setting in response to the envelope signal, the second gain setting being optimal for receiving a quadrature amplitude modulated signal.

Furthermore, the network receiver of claim 1 includes selection circuitry "*which determines whether the envelope signal represents a pulse position modulated carrier or an amplitude modulated carrier*". Moreover, the selection circuitry sets the amplifier gain setting to the first gain setting or the second gain setting based thereon.

*ii. Faugeron*

*Faugeron* relates to a squelch arrangement for an AM/FM radio receiver. The Examiner contends that the automatic gain control (AGC) circuit 5 associated with the AM demodulator amplifier 3 represents an input amplifier as recited in claim 1. The Examiner argues that although *Faugeron* does not show an AGC circuit in the FM demodulator 2, it would have been obvious to include one in the FM demodulator as merely a duplication of parts. Moreover, the Examiner contends that the switch 7 represents selection circuitry in accordance with the claimed invention. If the switch 7 is set in a first position, the AGC is dependent on the AM signal, and if the switch 7 is set in a second position, the AGC is dependent on the FM signal.

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Initially, it is noted that claim 1 recites that the very same input amplifier which amplifies the received modulated carrier signal has its gain settings set based on whether the received modulated carrier signal is detected to be a pulse position modulated carrier signal or a quadrature amplitude modulated signal. In arguing that it would have been obvious to modify *Faugeron*, the Examiner indicates that it would have been obvious to modify *Faugeron* to include a second AGC in the FM demodulator 2 which is similar to the first AGC in the AM demodulator 1. Assuming this were the case, for sake of argument, this would result in two input amplifiers which each provide appropriate gain based strictly on whether it is the AGC for the AM demodulator or the AGC for the FM demodulator.

In other words, the modification proposed by the Examiner would result in two different input amplifiers which each have adjustable gain geared to the respective AM or FM signal they are designed to amplify. This is directly opposite to the claimed invention in which it is the same input amplifier which is controlled to provide appropriate gain for the different types of modulated signals as recited in claim 1. Thus, the Examiner has not provided even a *prima facie* basis for the rejection.

Furthermore, claim 1 recites that the selection circuitry "determine(s) whether the envelope signal represents a pulse position modulated carrier or an amplitude modulated carrier", and sets the gain appropriately. The Examiner contends that switch 7 in *Faugeron* determines whether the signal is amplitude modulated or frequency modulated. Applicant respectfully disagrees.

The switch 7 in *Faugeron* does not "determine whether the envelope signal represents a pulse position modulated carrier or an amplitude modulated carrier" as recited in claim 1. The switch 7 is simply a switch which is operated by a user of the receiver to determine whether the receiver is set to receive AM signals or FM signals. The switch 7 in no way determines whether the envelope signal represents an AM signal or an FM signal. Rather, the switch 7 merely determines whether the signal is processed as an AM signal or an FM signal. There is no "determination whether the envelope signal represents a pulse position modulated carrier or an amplitude modulated carrier" as in the present invention. Nor is there any adjusting of the gain of

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a same input amplifier based on whether the envelope signal is determined to represent a pulse position modulated carrier or an amplitude modulated carrier as recited in claim 1. The switch 7 in *Faugeron* simply determines whether the received signals are processed as AM signals or FM signals, regardless of what the received signals actually are.

In the present invention as described in the application, the selection circuitry analyzes the received signal to determine whether the received signal is a pulse position modulated carrier or an amplitude modulated carrier. The invention then knows what gain to associate with the same input amplifier in order that the same input amplifier can provide optimal gain based on the detected type of modulation. There is no such determination in *Faugeron*. *Faugeron* relies on an operator to place the switch 7 in the desired position.

Therefore, the Examiner has again not presented a *prima facie* case of obviousness with respect to claim 1.<sup>1</sup>

iii) Claim 11

Claim 11 is a method claim corresponding to claim 1, and can be distinguished over the teachings of *Faugeron* for at least the same reasons given above. There is no teaching or suggestion of determining in *Faugeron* whether a modulated carrier signal is a pulse position modulated carrier or a quadrature modulated carrier. Moreover, there is no teaching or suggestion of setting of the gain of a same input amplifier based on the determined modulated carrier signal.

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<sup>1</sup>Although not particularly germane in view of applicant's arguments, applicant further takes issue with the Examiner's characterization of a frequency modulated (FM) signal being modulated by changing the position of a pulse and hence representing pulse position modulation. Frequency modulation (FM) is premised on modulating a varying frequency baseband signal onto a fixed frequency carrier signal. Typically this is done with a series of mixers which mix the carrier signal and baseband signal. There is no changing of the position of a pulse as suggested by the Examiner.

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*iv) Claim 21*

Claim 21 defines a network receiver which includes an input amplifier which is provided with a first gain setting or a second gain setting based on whether a carrier signal is modulated in accordance with a first or second modulation method. A selection circuit identifies whether the carrier signal is modulated in accordance with a first modulation method or a second modulation method, and provides a gain control signal to the input amplifier in accordance therewith.

For reasons explained above, *Faugeron* does not teach or suggest a selection circuit which identifies whether the carrier signal is modulated in accordance with a first modulation method or a second modulation method. Nor does *Faugeron* teach or suggest setting the gain of a same input amplifier based on such identification.

As explained above, the switch 7 in *Faugeron* does not identify whether a carrier signal is modulated in accordance with a particular modulation method. Rather, the switch 7 merely controls whether the received carrier signal is demodulated as an AM signal or an FM signal, regardless of whether the carrier signal is actually AM modulated or FM modulated.

For at least the above reasons, *Faugeron* does not teach or suggest the invention of claims 1, 11 and 21. Moreover, *Faugeron* does not teach or suggest the features of the claims which depend therefrom. Withdrawal of the rejection is respectfully requested.

**V. CONCLUSION**

Accordingly, all claims 1-24 are believed to be allowable and the application is believed to be in condition for allowance. A prompt action to such end is earnestly solicited.

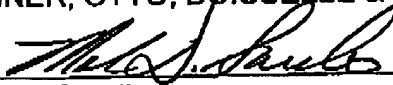
Should the Examiner feel that a telephone interview would be helpful to facilitate favorable prosecution of the above-identified application, the Examiner is invited to contact the undersigned at the telephone number provided below.

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Should a petition for an extension of time be necessary for the timely reply to the outstanding Office Action (or if such a petition has been made and an additional extension is necessary), petition is hereby made and the Commissioner is authorized to charge any fees (including additional claim fees) to Deposit Account No. 18-0988.

Respectfully submitted,

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